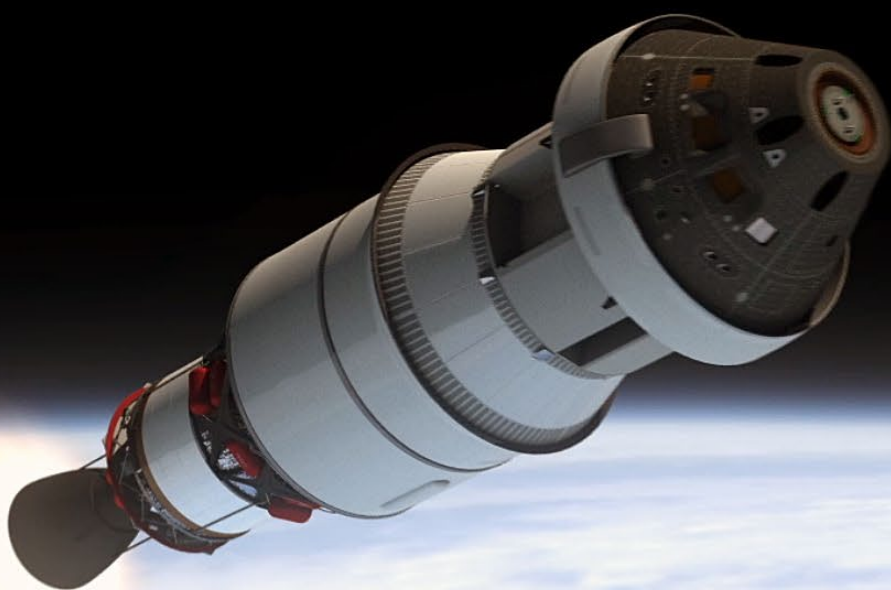




ORION'S FIRST FLIGHT VIEWING EVENT PLAN

ORION





ORION'S FIRST FLIGHT

FIRST STEP TO DEEP SPACE

NASA is building a human space exploration system that will provide an entirely new capability to launch crew and cargo missions, extend human presence beyond low-Earth orbit and enable new missions of exploration throughout our solar system. The Orion spacecraft is a key component of this plan, and Orion's first mission – Exploration Flight Test-1 (EFT-1) – will set NASA on the journey to accomplishing these goals.

To build awareness and excitement for this historic mission, NASA and its industry team partners invite you to participate as a NASA Orion First Flight viewing event site. You and your guests will be part of this crucial space exploration milestone in spaceflight history.

The flight on Dec. 4, 2014, is more than just a celebration of Orion's first step into deep space. It is an opportunity to experience the thrill of the next step in human space exploration through interactive events specifically developed to enhance the entire launch viewing experience.

NASA invites you to participate in this special occasion and embrace the theme **first step to deep space**. Orion's first flight will help garner interest in deep space exploration as we once again go beyond Earth orbit.

FUN FACTS



Orion will lift off from the Cape Canaveral Air Force Station in Florida, travel a total distance of 60,000 statute miles in two orbits around the Earth, and splash down in the Pacific Ocean.



Orion will travel 3,600 miles above the Earth's surface; farther than a human spaceflight vehicle has traveled in 40 years, and 15 times farther than the International Space Station!



At the conclusion of the mission, Orion will re-enter the Earth's atmosphere at 20,000 mph, with its heat shield deflecting more than 4,000 degrees of heat – twice as hot as molten lava. It is the world's largest heat shield!

Orion has 11 parachutes that will slow the spacecraft down to a safe speed – 20 mph – for splashdown. When fully deployed, the canopies of the three main parachutes would cover an entire football field.



SEE

3... 2... 1... LIFTOFF

You'll learn about the mission from the experts at NASA, Lockheed Martin, and United Launch Alliance! You'll see the launch pad and launch control center through wide angle camera views! At ignition of the main engines, you'll hear the roar of the rockets!

Orion's launch window opens at 7:00 a.m EST. with splash down in the Pacific Ocean four hours after launch. Live coverage of the flight will begin five hours prior to launch and the NASA program three hours before launch. Be sure to follow Orion's countdown to launch at [ExploreDeepSpace.com](https://www.nasa.gov/exploredeepspace) for up-to-the-minute updates.

Orion's first flight will be broadcast live on NASA Television and is also available online at www.nasa.gov/nasatv. While viewing the flight in an auditorium setting, your guests will feel as though they are at the launch site.

Orion contractors and suppliers in your area may be able to provide a guest speaker for your First Flight viewing event. Please contact us if you would like to request a subject matter expert at jsc-orion-outreach@mail.nasa.gov.

DO

EVENT & AUDIENCE ENGAGEMENT

Your event can take place at any time during the flight or even immediately following splashdown!

- Host an “Early Bird Breakfast” for special guests or members to view the early morning launch.
- Organize an event in which guests view the entire flight and NASA TV mission coverage from launch to landing as it happens.
- Plan a “Splash Bash” for attendees to see a recording of the launch and view the splashdown live.

Although the highlight of your event is for guests to see the launch and splashdown, you can enhance the experience by organizing a variety of activities at your event. Younger audiences can be engaged throughout the day with demonstrations and hands-on activities, such as:

- Design an Orion Spacecraft
- Be an Orion Astronaut
- Taking Flight with Orion
- Launch the Rocket

For details on these activities and others you can share with your guests – as well as fact sheets, educational materials and multimedia items – visit [**ExploreDeepSpace.com**](https://www.nasa.gov/engage/deepspace)



SHARE

PROMOTE YOUR EVENT

Follow Orion for the latest news

Help us spread the excitement! Share our posts and photos, retweet us, post on our wall, tweet at us and tag us in your photos as you celebrate Orion's first test flight.



Facebook.com/NASAO Orion

Our Facebook page is loaded with photos, videos and information on the Orion program. Like our page, comment on our photos and share our content with your friends.

You can also tag us in photos taken at your launch viewing event at NASA's Orion Spacecraft.



@NASA_Orion

Want all the breaking news on Orion? You can follow us on Twitter @NASA_Orion and retweet our photos and posts.

During your first flight viewing event you can tweet about your celebration using the hashtags #Orion, #EFT1, #ImOnBoard, #JourneytoMars, #DeltaIV

You may also want to tweet about Orion's contractors, including @LockheedMartin, @AerojetRdyne, @ATK, @ISYS_Tech, and @TXTSystems



Plus.Google.com/+NASAO Orion

Our Google+ account is your one stop shop for photos and videos of Orion's progress in both assembly and testing.

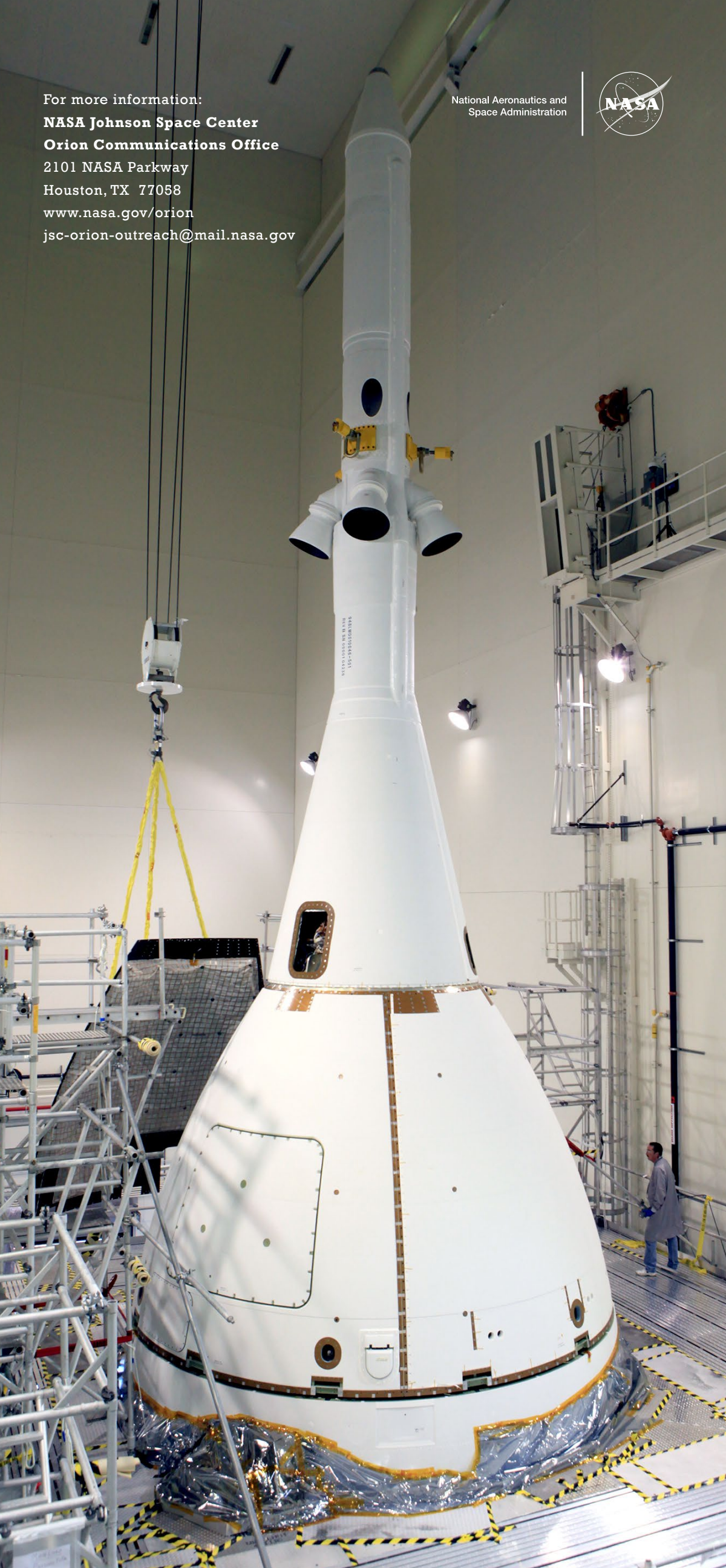


Flickr.com/NASAO Orion

Looking to jazz up your posts and tweets about Orion? You can find any of our photos and graphics at our Flickr account and share them using hashtags #Orion, #ImOnBoard, #EFT1, #JourneytoMars, #DeltaIV.

For more information:
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Orion Communications Office
2101 NASA Parkway
Houston, TX 77058
www.nasa.gov/orion
jsc-orion-outreach@mail.nasa.gov

National Aeronautics and
Space Administration



Proud participants in Orion's First Flight and the Viewing Event Kits



LockheedMartin.com

Lockheed Martin is the prime contractor building the Orion Multi-Purpose Crew Vehicle, NASA's first spacecraft designed for long-duration, human-rated deep space exploration. Orion will transport humans to interplanetary destinations beyond low Earth orbit, such as asteroids, the moon and eventually Mars, and return them safely back to Earth. Thousands of people across the country work at the hundreds of subcontractor, small business and supplier companies helping Lockheed Martin build this next generation space exploration vehicle.



Rocket.com

As a member of the Orion industry team, Aerojet Rocketdyne provides propulsion systems for nearly every component of the spacecraft: the crew module, service module, main engine and jettison motor for the Launch Abort System. Aerojet Rocketdyne is a world-recognized aerospace and defense leader principally serving the missile and space propulsion, and armaments markets.



ATK.com

ATK is an aerospace, defense, and outdoor sports and recreation company with operations in 21 states, Puerto Rico, and internationally. ATK built two key motors for Orion's Launch Abort System, which propels the Orion crew module away from danger in the event of an emergency on the launch pad or during Orion's ascent to orbit. The Launch Abort Motor can activate within milliseconds to lift the crew module to safety with an acceleration over 10gs. The Attitude Control Motor provides steering capability for the system.



ISYSTechnologies.com

ISYS Technologies is an award winning Woman-Owned Small Business providing Engineering and Information Technology services to Federal, State, and Local government. ISYS is a critical asset in supporting NASA's next generation human spaceflight programs as a member of the Lockheed Martin Orion team. ISYS provides specialized mechanical engineering expertise in several different areas of the program.



TextronSystems.com

Textron Systems has been providing innovative solutions to the defense, homeland security and aerospace communities for more than 50 years. Its Missile & Space Systems team's contributions to NASA human space flight programs date back to the Apollo Program of the 1960s. Today, the company's Avcoat™ ablator material is being used on Orion's primary heat shield to help protect future astronauts returning from deep-space missions at speeds of more than 20,000 mph!